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# BEFORE THE BOARD OF PATENT APPEALS
# AND INTERFERENCES

Application Number: 09/998,569
Filing Date: November 16, 2001
Appellant(s): COPE, WARREN

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Michael J. Setter
For Appellant

## EXAMINER'S ANSWER

This is in response to the appeal brief filed December 14, 2006 appealing from the

Office action mailed July 14,2006.

## (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

## (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

## (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

## (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

## (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

## (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.


**(8) Evidence Relied Upon**

| 6175871 | Schuster | 1-2001 |
|---|---|---|
| 6,157,377 | Shah-Nazaroff | 12-2000 |

Gross, Harold et. al., RealPlayer 8 Plus User Manual, RealNetworks, 2000, pp. 3-10,

19, 37-51, 57-73.


**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-5, 7-11, 13, 14, 16- 20, 22-26, 28, 29, 31-35, 37-41, and 44 are rejected

under 35 U.S.C. 103(a) as being unpatentable over Gross (2000) in view of Schuster

(US 6,175,871).

As regards Claims 1,16, and 31, Gross et al. disclose a network interface

configured to receive a network signal from a communication network wherein the

network signal includes video (pg. 3, line 8); a memory configured to store video from

the network signal (pg. 3, line 7); a video interface (pg. 3, line 10) configured to transfer

a video signal to a video display wherein the video signal includes the memory (pg. 44,

lines 10-12).

Gross et Al. do not disclose that the processing system is configured to

determine a first time period based on the video display rate times the first amount, to

determine a second time period based on the network transfer rate times the second

amount, and to initiate the transfer of the video signal when the first time period (i.e. the

first variable) is equal to the second time period (i.e. the second variable) (col. 2, lines

57-59). Schuster does disclose that the processing system is configured to determine a

first time period based on the video display rate times the first amount, to determine a

second time period based on the network transfer rate times the second amount (col.3,

lines 11-15). Finally, the examiner wishes to restate that the Gross when combined with

Shuster does indeed disclose the buffer sizing technique claimed by the applicant.

Gross keeps track of video display rate, network transfer rate, a first amount of video

stored in the memory, a second amount of video to be subsequently received in the

network signal, and a network transfer rate that is slower than the video display rate (pg.

2, paragraph 2, of Non-final rejection).

Furthermore, Gross notes that RealPlayer allows the user to watch high quality

video over a slower connection. It does this by using the buffer to hold the first amount

video (RealPlayer is able to tell what the quality of video is from the connection see

page 51, lines 7-10), as well as being able to determine the second amount of video not

yet received (again, see page 51, lines 7-10 and status bar, page 15, fig. 3.11). The

larger the discrepancy between connection speed and the quality of the video, the

larger the buffer will be and the longer the user will have to wait for the video to start. Of

course, this is better than the "dumb" method of simply buffering the entire clip before

playback (page 52, lines 5-9). It would have been obvious to one of ordinary skill in the

art to combine Gross' video system which maintains these variables with the buffer

resizing method disclosed in Schuster to allow the user to experience high quality video over low quality connections.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to add the buffer determination system of Schuster, an analogous art, with the multimedia system of Gross because having only the necessary amount of the video buffered in the memory before paying is more convenient than having the entire video clip buffered, which is the default in Real Player.

As regards Claims 2, 17, and 32, Gross et al. further disclose that the processing system is configured to determine the network transfer rate based on an initial amount of the video received in the network signal and a time period to receive the initial amount of the video (pg. 37, lines 22-23). It is inherent in the 'Perfect Play' setting that before determining which quality of video the user receives, the computer must first determine the network transfer rate. 'Perfect Play' allows the user to experience the highest quality stream. If the connection cannot support a certain quality of bit stream that it is receiving, it seeks a lower the bit stream. Perfect Play does this by determining the network transfer rate based on the video that it has already received.


As regards Claims 3, 18, and 33, Schuster discloses that the processing system is configured to initiate the transfer of the video signal when the first time period (i.e. the first variable) is equal to the second time period (i.e. the second variable) (col. 2, lines 57-59).

As regards Claims 4, 19, and 34, Gross et al. disclose that the processing system is configured to initiate the transfer of the video when the first time period (i.e. the first variable) is greater than the second time period (i.e. the second variable) (col. 2, lines 57-59).

As regards Claims 5, 20, and 35, Gross et al. disclose that the first amount of the video in the memory includes a previously received and displayed portion of the video (that is, the video represented to the left of Position Slider) (pg. 19, Navigation Table).

As regards Claims 7, 22, and 37, Gross et al. disclose that the processing system is configured (by raising the amount of video buffered) to initiate the transfer of the video signal when the video can be continuously viewed to completion without intermission and before all of the video is received in the network signal (pg. 65, lines 11-13).

As regards Claims 8, 23, and 38, Gross et al. disclose that the processing system is configured (by raising the amount of video buffered) to initiate the transfer of the video signal when the video can be viewed to completion with one intermission and before all of the video is received in the network signal (pg. 65, lines 11-13).

As regards Claims 9, 24, and 39, Gross et al. disclose that the processing system is configured to initiate the transfer of the video signal when a user-selected portion of the video can be viewed to completion without intermission and before all of the video is received in the network signal (pg. 65, lines 11-13).

As regards Claims 10, 25, and 40, Gross et al. disclose that the processing system is configured to transfer a menu signal to the video display to display a user selection menu (pg. 9, figure 3.1).

As regards Claims 11, 26, and 41, Gross et al. disclose that the user selection menu indicates a plurality of available videos for viewing on-demand (such as channels) and the user selection selects the video from the available videos (pg. 9, figure 3.1).

As regards Claims 13, 28, and 43, Gross et al. disclose that the user selection menu (such as in the status bar) indicates a time remaining before the transfer of the video signal will initiate (pg. 9, figure 3.1).

As regards Claims 14, 29, and 44, Gross et al. disclose that the user selection menu provides a notice when the transfer of the video signal is initiating (pg. 9, figure 3.1).

Claims 12, 15, 27, 30, 42, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gross (2000) in view of Schuster (US 6,175,871) and in further view of Shah-Nazaroff (US 6,157,377).

As regards Claims 12, 27, and 42, Gross and Schuster jointly disclose the video system, method, and soft program of Claims 11, 26, and 41 but do not disclose that the user selection menu indicates a plurality of available display rates and the user selection selects the video display rate from the available video display rates. Shah-Nazaroff does disclose that the user selection menu indicates a plurality of available display rates and the user selection selects the video display rate from the available video display rates (figure 5).

Gross, Schuster, and Shah-Nazaroff all come from the same field of endeavor,

namely the field of multimedia transmission.

At the time of invention, it would have been obvious to a person of ordinary skill

in the art to add the available display rates of Shah-Nazaroff to the multimedia system

of Schuster and Gross because users may enjoy more downloading lower quality video

if it takes less time.

As regards Claims 15, 30, and 45, Shah-Nazaroff discloses that the video signal

is configured as a channel for a satellite system video decoder (figure 5).

**(10) Response to Argument**

In response to the appellant's arguments, the examiner respectfully disagrees

that the rejection should be reversed.  Only those arguments raised by the appellant

pursuant to the particular issues on appeal have been considered and addressed by the

examiner.  Any further arguments regarding particular limitations not specifically argued

or other reasoning regarding deficiencies in a prima facie case of obviousness that the

appellant could have made are considered as having been conceded by the appellant

for the basis of the decision of this appeal and are not being subsequently addressed by

the examiner for the Board's consideration.  Should the panel find that the examiner's

position/arguments or any aspect of the rejection is not sufficiently clear or a particular

issue is of need of further explanation, it is respectfully requested that the case be

remanded to the examiner for further explanation prior to the rendering of a decision.


**A.      Claims 1, 3-5, 7, 10-11, 13-14, 16, 18-20, 22, 25-26, 28-29, 31, 33-35, 37, 40-41,**

**and 43-44 are not patentable over the cited art.**

After the appellant discusses the limitations found in independent claim 1 (page

4, paragraphs 1-2), the appellant turns his attention to the cited prior art of Gross and

Schuster.  The appellant, on paragraph 3 of page 4, states that Gross and Schuster

disclose "jitter buffers."  Jitter buffers are small memories and are used "where the

network transfer rate is approximately the same as the video display rate" (page 4,

paragraph 3).  These buffers are used to make sure that if small irregularities in the

network cause packets to arrive late, the stream may be played out of the buffer (page

5, paragraph 1). The appellant maintains that these "jitter buffers" are not capable of providing playback when the network transfer rate is slower than the display rate because these buffers "would constantly starve" unlike the buffer in the invention (page 5, paragraph 1).

In response to appellant's argument that the references fail to show certain features of appellant's invention, it is noted that the features upon which appellant's relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In the presently presented Claim 1, the limitation pertaining to a buffer simply calls for "a memory configured to store the video from the network signal" (page 9). As concurred by appellants, Gross discloses a memory, or buffer (such as page 65), that is capable of storing video from a network signal. However, contrary to appellant's arguments the claim does not require or preclude any particular type or size of memory. Therefore, the so called "jitter buffering" meets the broadly claimed recitation of 'memory'.

It is further noted that Gross also teaches that buffers can be used for both jitter buffering as well as allowing high quality video play over a lower quality network connection (see page 44, line 9-25 - Gross discloses one reason for buffering- to smooth out the replay of a video). Gross also teaches that buffers can be used in the same way that the appellant teaches, namely to allow a user to watch high quality video over a low quality network connection (page 48, lines 11-14). In view of the above arguments, it is clear that the appellant's claim as it stand does not preclude jitter

buffers from meeting the limitations of said claim and that, nevertheless, Gross still

discloses a buffer or 'memory' that is capable of far more than jitter buffering.

The appellant also argues, on pages 5 and 6, that Gross and Schuster does "not

initiate playback based on the network transfer rate and video display rate as claimed."

The appellant maintains that Gross sets the buffer via user or default settings.

Furthermore, the appellant states that Gross can only match network rate with display

as opposed to the appellant's invention with disparate rates (page 5, paragraph 3). The

appellant maintains that Schuster deals solely with buffers sized based on packet loss

and, therefore, is too small to buffer data when the display rate is higher than the

network transfer rate. In conclusion, the appellant affirms his position that both

Schuster and Gross disclose jitter buffers and that, in no way can one skilled in the art

modify one in view of the other to arrive at the appellant's claimed invention. The panel

should not find these arguments persuasive.

Gross also discloses initiating playback based on network transfer rate and video

display rate. As Gross discloses, clips are encoded at a certain bandwidth (higher

bandwidth, higher quality, in general) and that RealPlayer keeps track of this bandwidth

(see "Encoding", page 47, lines 16-32). RealPlayer also monitors the network

connection and keeps track of the connection from the server to the client (page 51,

lines 17-23). While RealPlayer can pick the stream that is encoded at the bit rate

closest to the user's network connection, it also "buffers automatically" to allow a user to

watch high quality media over slower connection. Playback begins when enough of the

stream is buffered. While this takes time, it is far better than buffering the entire clip

(page 52, 5-9).  The examiner also wishes to note that Schuster is relied upon to

disclose the automatic resizing of buffers and that this feature is explicitly disclosed on

column 3, in lines 11-15.  Given the stated capabilities of Gross, the examiner maintains

that it would have been obvious to one skilled in the art at the time to utilize buffer

resizing, as disclosed in Schuster, with the automatic buffering of higher quality video

over lower quality connections so that user's viewing experience can be improved

without taking up unnecessary resources.


**B.     Claims 8, 23, and 38 are not patentable over the cited prior art.**

On page 7 of the Appeal Brief, the appellant argues that neither Gross nor

Schuster disclose that a video can be "viewed to completion with one intermission," as

stated in Claim 8.  The appellant maintains that neither Gross nor Schuster mention an

intermission and, at any rate, a "jitter buffer" is unable to store more than a few seconds

of media.  The panel should not find these arguments persuasive.

The issue concerning the appellant's labeling of the memory found in Gross and

Schuster as only a "jitter buffer" has already been addressed in the preceding section A.

While the examiner agrees with the appellant that the word "intermission" is not used

either Gross or Schuster, Gross does address the same functionality.  As Gross states,

media may be contained in one clip or in many.  Clips can then be played on after the

other (and, these, sometimes are referred to as multi-clips).  Using the techniques

described above, the user is able to watch one clip, have an intermission or break, and

then watch the other, all being part of the same media presentation (see "How does streaming occur," page 49, lines 15-22).

Furthermore, Gross provides the user with a great deal of control over the media being viewed. One of the many options provided by RealPlayer is pause. The pause button feature allows a user to view the media; pause the media (which would provide an intermission), and then restart the media (using the play feature) to watch the remaining segment of the media (page 19).


**C      Claims 9, 24, and 39 are not patentable over the cited prior art.**

On page 7 of the Appeal Brief, the appellant argues that neither Gross nor Schuster disclose that a "user-selected portion of the video can be viewed to completion without an intermission," as required by Claim 9. Again, the appellant maintains that neither Gross nor Schuster account for this functionality and, at any rate, a "jitter buffer" is unable to store more than a few seconds of media. The panel should not find these arguments persuasive.

The issue concerning the appellant's labeling of the memory found in Gross and Schuster as only a "jitter buffer" has already been addressed in the preceding section A. Again, Gross discloses the ability for a media presentation to be broken up over many clips. The user may choose to watch one of these clips but not the others. Using the techniques discussed in Gross and cited above in section A, the user would then be able to watch a user-selected portion to completion without an intermission (see "How does streaming occur," page 49, lines 15-22).

Again, the very nature of streaming media and RealPlayer provide the user with a great deal of control over the presentation. In a buffered system such as RealPlayer, the media commences playback before it has been entirely buffered. RealPlayer also allows controls over the streaming media that allow the user to start and stop (or pause) a media clip at the leisure of the user (page 19) thereby allowing for the user to watch the presentation without 'intermission' or without stop/pause, if so desired.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

DRO

March 14, 2007

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